FACT SHEET

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Advanced Process and Technology Experiment 2001 (APTX 01)

The Advanced Process and Technology Experiment 2001 is one in a series of Air Force experiments designed to help the US Air Force prepare for the challenges of the 21st Century Expeditionary Aerospace Force operations. This small-scale experiment will explore information sharing between the US and its allies in the Combined Air Operations Center (CAOC). It is designed to anticipate and replicate a portion of a future command and control system to provide Air Force leadership a better understanding of the process, systems, and technology options needed to facilitate allied participation in future large-scale Joint Expeditionary Force Experiments (JEFX) and real-world military operations.

APTX 01 will evaluate selected technology and process capabilities for the semi-automated transfer of releasable information across security domains; a man-in-the-loop is used for data releasability verification. It will also examine selected processes and technologies associated with collaboration across security domains. Selected phases of the Joint Air Operations Planning Process will serve as the basic process for examining the technologies that support an "open floor" CAOC environment where alliance members share all filtered data and move about freely. **To alleviate the problem of inadvertent release of US classified information, all individuals involved in this experiment will be appropriately cleared US citizens.**

Although relatively small in terms of funding and manpower, APTX 01 has the potential for impacting future coalition operations. In addition, through an analysis of the current state of information sharing in an alliance environment and focusing on the current impediments to achieving the desired end-state, APTX 01 can provide risk reduction for the JEFX 02 focus area of time critical targeting including the key enabling capability of ISR management.

APTX 01 Concept of Operations

The two-day experiment begins 21 May 01 and will be divided into four phases. Phases 1 and 2 will take place in the morning and afternoon of Day One. Phases 3 and 4 will take place in the morning and afternoon of Day Two. The individual operators will be given scripted activities for their position, which includes information to be transferred from the US enclave to the "open floor" and the expected response. In general during the first three phases, the activities will cover the Initial Data Load, transfer of the Candidate Target List and Target Nomination List, Target Folder Generation, and Order of Battle (OB) Maintenance. The fourth phase will allow for free-play to provide system engineers and warfighters an opportunity to try new ideas and procedures.

APTX 01 List of Initiatives

Information Dissemination & Exchange Architecture (IDEA)
Enables the interoperation of servers, clients, and applications.

Information Support Server Environment (ISSE) Guard
Integrates existing and emerging ISSE capabilities within the TBMCS framework to demonstrate viable solution for timely US/CAOC cross-domain information exchange.

Instant Messaging Collaboration
Enables instant messaging across the boundary between the US and Coalition enclaves.

Voice Collaboration
Enables secure voice collaboration between the open floor CAOC and the US enclave.

E-Mail with Attachments Collaboration
Enables the transmission of extended text and other types of files across the enclave boundary.